

**Commonwealth of Kentucky  
Energy and Environment Cabinet  
Department for Environmental Protection  
Division for Air Quality  
200 Fair Oaks Lane, 1<sup>st</sup> Floor  
Frankfort, Kentucky 40601  
(502) 564-3999**

**Final**

**AIR QUALITY PERMIT  
Issued under 401 KAR 52:020**

**Permittee Name:** Novelis Corporation  
**Mailing Address:** 302 Mayde Road,  
Berea, KY 40403

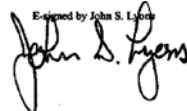
**Source Name:** Same as above  
**Mailing Address:** Same as above

**Permit:** V-04-059 R2  
**Agency Interest:** 2798  
**Activity:** APE20080003  
**Review Type:** Title V, Construction / Operating  
**Source ID:** 21-151-00043

**Regional Office:** Frankfort Regional Office  
663 Teton Trail  
Frankfort, KY 40601  
(502) 564-3358

**County:** Madison

**Application**  
**Complete Date:** July 22, 2008  
**Issuance Date:** April 11, 2005  
**Revision Date:** November 25, 2008  
**Expiration Date:** April 11, 2010

E-signed by John S. Lyons  


---

**John S. Lyons, Director  
Division for Air Quality**

## TABLE OF CONTENTS

SECTION		DATE OF ISSUANCE	PAGE
A.	PERMIT AUTHORIZATION	Revision 2	2
B.	EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS	Revision 2	3
C.	INSIGNIFICANT ACTIVITIES	Revision 2	32
D.	SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS	Revision 2	33
E.	SOURCE CONTRL EQUIPMENT OPERATIN REQUIREMENTS	Revision 2	36
F.	MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS	Revision 2	37
G.	GENERAL PROVISIONS	Revision 2	40
H.	ALTERNATE OPERATING SCENARIOS	Revision 2	47
I.	COMPLIANCE SCHEDULE	Revision 2	48

**Definitions:** The following definitions apply to all abbreviations and variables used in this permit:

PT – total particulate matter  
 PM<sub>10</sub> – particulate matter equal to or smaller than 10 micrometers  
 CO – carbon monoxide  
 NO<sub>x</sub> – nitrogen oxides  
 SO<sub>2</sub> – sulfur dioxide  
 Pb – lead  
 VOC – volatile organic compounds  
 D/F – dioxin/furan

No	Permit type	Activity	Complete Date	Issuance Date	Summary of Action
1	Initial Issuance (V-04-059)	APE20040001	01/24/01	4/11/05	Title V Permit. Name change from Alcan Aluminum Corp. to Novelis.
2	Minor Revision (V-04-059 R1)	APE200060002	03/03/06	4/20/06	Addition of Sow Preheater # 3.
3	Minor Revision (V-04-059 R2)	APE200080003	07/22/08	TBD	Rotogrind machine addition.

## **SECTION A – PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****1 SHREDDERS (Stack P-1 & P-11)**

- 01 (P-1)\* Line 1 Cold Dust Control System: This system consists of a Dropout Box and a Baghouse. The following emission units are vented to the Line 1 Cold Dust Control System:
- Shredder #1
  - Discharge Conveyor #1
  - Bucket Elevator and Drum Magnet #1
  - Surge Hopper and Weight Belt #1
  - Fines Separator (Rotex Screen) #1
- Construction commenced: May 13, 1998
- 01 (P-1)\* Line 2 Cold Dust Control System: This system consists of a Dropout Box and a Baghouse. The following emission units are vented to the Line 2 Cold Dust Control System:
- Shredder #2
  - Discharge Conveyor #2
  - Bucket Elevator and Drum Magnet #2
  - Surge Hopper and Weight Belt #2
  - Fines Separator (Rotex Screen) #2
- Construction commenced: May 13, 1998
- 11 (P-11) Rotogrind Shredder Unit: This system consists of a shredder, baghouse, and conveyor for delivery of shredded aluminum raw material to line 1 and/ or line 2 sidewells.
- Control equipment: Baghouse
- Construction commenced: August, 2008

\*The Line 1 and Line 2 Cold Dust Control Systems are discharged through a common stack, P-1.

**APPLICABLE REGULATIONS:**

**401 KAR 51:017 Prevention of Significant Deterioration** – Applies to PM/PM<sub>10</sub> emissions. This regulation supersedes mass emission standards prescribed by 401 KAR 59:010.

**401 KAR 59:010 New Process Operations** – Applies to visible emissions.

**40 CFR 63 Subpart RRR Secondary Aluminum Production NESHAP** – Applies to PM emissions from each aluminum shredder.

**1. Operating Limitations: See SECTION D 1.****2. Emission Limitations:**

- a. Pursuant to 401 KAR 59:010, Section 3 (1), visible emissions from each stack or vent associated with the emission units described above shall not equal or exceed 20%.

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****Compliance Demonstration:**

The permittee shall demonstrate compliance through monitoring and maintenance of the records as specified in points **4. Specific Monitoring Requirements** and **5. Specific Record Keeping Requirements** below.

- b. Pursuant to 401 KAR 51:017, Section 9 (3) (BACT), particulate (PM<sub>10</sub>) emissions from Stack P-1 shall not exceed 2.0 lbs/hr.

**Compliance Demonstration:**

Compliance with the limits described above shall be determined by comparing the allowable rate to the actual rate as calculated in **SECTION D 2.a.**

- c. Pursuant to 40 CFR 63.1505(b) particulate emissions from each shredder shall not exceed 0.01 grains/dscf.

**Compliance Demonstration:**

Compliance with the limits described above shall be determined by comparing the allowable rate to the actual rate as calculated below:

$$E_{f_{PM}} = \frac{E_{PM} \cdot 7000}{f \cdot 60}$$

Where  $E_{TPM}$  is the particulate emission rate based on exhaust gas flowrate (grains/dry standard cubic foot),  $E_{PM}$  is the actual hourly particulate emission rate as determined during a performance test (pounds/hour) and  $f$  is the actual exhaust gas flowrate as determined during the performance test (dry standard cubic feet/minute).

**3. Testing Requirements:**

- a. The permittee shall test for particulate matter emissions by EPA Method 5 or a method approved by the Division for the Rotogrind Shredder Unit (P-11) within 180 days of startup.
- b. See **SECTION D 3.**

**4. Specific Monitoring Requirements:**

The permittee shall monitor the following parameters:

- a. Monthly and 12-month rolling total hours of operation.
- b. Monthly and 12-month rolling total scrap throughput.
- c. Hourly pollutant emission rates (based on monthly average).
- d. Flowrate-based pollutant emission rates.
- e. For each baghouse, daily pressure drop from the baghouse entrance to the baghouse exit.
- f. Capture system performance in accordance with the OM&M plan as required by Subpart RRR.
- g. For each control system, daily visual inspections where:
  - i. If no visible emissions are observed then no further monitoring is required.
  - ii. If visible emissions are observed, the permittee shall perform a Method 9 reading.

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****5. Specific Recordkeeping Requirements:**

The permittee shall maintain records of the following information:

- a. Monthly and 12-month rolling total hours of operation.
- b. Monthly and 12-month rolling total scrap throughput.
- c. Hourly pollutant emission rates (based on monthly average).
- d. Flowrate-based pollutant emission rates.
- e. For each baghouse, daily pressure drop measurements.
- f. Each time an emission unit is operating without the associated control equipment due to an unscheduled shut-down or malfunction, a log of the incident which shall include:
  - i. A description of the shutdown or malfunction.
  - ii. The duration of the shutdown or malfunction.
  - iii. The cause of the shutdown or malfunction.
  - iv. Any corrective action taken.
- g. Daily (calendar day) and during all periods of control equipment malfunction, a log of visible emissions from each control system. If visible emissions are observed, the log shall indicate:
  - i. Whether the visible emissions were normal for the process.
  - ii. Method 9 readings if any visible emissions are seen.
  - iii. The cause of the abnormal visible emissions.
  - iv. Any corrective actions taken.
- h. All maintenance activities performed at each piece of control equipment.
- i. Current operation, maintenance, and monitoring (OM&M) plan.

**6. Specific Reporting Requirements:**

- a. The permittee shall submit a semi-annual summary report containing the following information:
  - i. Monthly and 12-month rolling total hours of operation.
  - ii. Monthly and 12-month rolling total scrap throughputs.
  - iii. Hourly pollutant emission rates (based on monthly average).
  - iv. Flowrate-based pollutant emission rates.
  - v. Daily baghouse pressure drop measurements.
- b. See **SECTION D 6.a** and **6.b.** on **page 35** below.

**7. Specific Control Equipment Conditions:**

- a. Pursuant to 40 CFR 63 Subpart RRR 63.1506, the permittee shall:
  - i. Design and install an emission capture and collection system in accordance with Industrial Ventilation: A Handbook of Recommended Practice.
  - ii. Operate the system in accordance with the OM&M plan.
- b. The permittee shall:
  - i. Capture and control particulate emissions.
  - ii. Operate all dropout boxes and baghouses properly and in accordance with baseline parameters set during the performance test.

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS,  
AND OPERATING CONDITIONS**

- iii. Operate all dropout boxes and baghouses at all times any of the associated emissions units listed in the description above are in operation.
- iv. Install and operate a bag leak detector system such that:
  - The alarm does not sound more than 5% of operating time fraction in any 6-month period.
  - Should the bag leak detector sound an alarm, the permittee shall initiate corrective action within 1 hour and complete the corrective action procedures in accordance with the OM&M plan.
  - If inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted.
  - If corrective action is required, each alarm shall be counted as a minimum of 1 hour.

**Compliance Demonstration:** The permittee shall demonstrate compliance through maintenance of the records as specified in **5. Specific Record Keeping Requirements** above.

- 8. **Alternate Operating Scenarios:** NA
- 9. **Compliance Schedule:** NA
- 10. **Compliance Certification:** See SECTION D 10.

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****2                    MELTING & HOLDING FURNACES (Stacks P-2 & P-10)**

- 02 (P-10)    Melter 1A/1B Hot Dust Control System: The following emission units are vented to Line 1 Hot Dust Control System:
- Melt furnace 1A stack, sidewell, and hood
  - Melt furnace 1B stack, sidewell, and hood
  - Hold furnace 1C & 2C door hoods
  - Hot shred conveyors

For purposes of this permit, aluminum produced at this facility is the result of processing one or more of the following: aluminum shreds, used beverage cans, scrap aluminum sheets, scrap aluminum stampings, aluminum siding, aluminum extruded shapes, flat aluminum stock, aluminum ingots (sows), molten aluminum.

- 02 (P-2)\*    Melter 2A Hot Dust Control System: This system consists of a Drop Out Box and a Baghouse. The following emission units are vented to the Melter 2A Hot Dust Control System:
- Melt Furnace 2A Stack
  - Melt Furnace #2A and #2A Side Wells
  - Melt Furnace #2A Hood
  - Hot Shred Conveyors

- 02 (P-2)\*    Melter 2B Hot Dust Control System: This system consists of a Drop Out Box and a Baghouse. The following emission units are vented to the Melter 2B Hot Dust Control System:
- Melt Furnace 2B Stack
  - Melt Furnace #2B and #2B Side Wells
  - Melt Furnace #2B Hood
  - Hot Shred Conveyors

\*The Melter 2A and 2B Hot Dust Control Systems are discharged through a common stack, P-2.

**APPLICABLE REGULATIONS:**

**401 KAR 51:017 Prevention of Significant Deterioration** – Applies to CO, NO<sub>x</sub>, VOC, and PM/PM<sub>10</sub> emissions. This regulation supersedes mass emission standards prescribed by 401 KAR 59:010.

**401 KAR 59:010 New Process Operations** – Applies to visible emissions.

**40 CFR 63 Subpart RRR Secondary Aluminum Production NESHAP** – Applies to PM/PM<sub>10</sub>, HCl and D/F emissions from each Group 1 Furnace.

**1.                    Operating Limitations:**

- a. Pursuant to 40 CFR 63, Subpart RRR, Section 63.1506, the permittee shall:
  - i. Maintain the level of molten metal above the top of the passage between the side-well and hearth during reactive flux injection.



**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

- ii. Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
  - iii. Install, calibrate, operate, and maintain a device to measure and record the total weight of material fed/charged to or the aluminum produced by the affected source or emission unit over the same operating cycle or time period used in the performance test or an approved alternative.
  - iv. Provide and maintain easily visible labels posted at each emission unit that identify the applicable emission limits and the means of compliance.
- b. See **SECTION D 1.**

**2. Emission Limitations:**

- a. Pursuant to 401 KAR 59:010, Section 3 (1), visible emissions from each stack or vent associated with the emission units described above shall not equal or exceed 20%.

**Compliance Demonstration:**

The permittee shall demonstrate compliance through monitoring and maintenance of the records as specified in points **4. Specific Monitoring Requirements** and **5. Specific Record Keeping Requirements** below.

- b. Pursuant to 401 KAR 51:017 Section 9 (3) (BACT), mass emissions from each stack (P-2 and P-10) shall not exceed the following limits:
- i. CO emissions shall not exceed 20.64 lbs/hr.
  - ii. NO<sub>x</sub> emission shall not exceed 8.0 lbs/hr.
  - iii. VOC emissions shall not exceed 7.2 lbs/hr.
  - iv. PM<sub>10</sub> emissions shall not exceed 6.0 lbs/hr.

**Compliance Demonstration:**

Compliance with the limits described above shall be determined by comparing the allowable rate to the actual rate as calculated in **SECTION D 2.a.**

- c. Pursuant to 40 CFR 63 Subpart RRR, the source has a choice to limit emissions from Group 1 Furnaces on an individual basis or as part of a Secondary Aluminum Processing Unit (SAPU). As individual units, emissions from any Group 1 Furnace shall not exceed the following limits:
- i. PM emissions shall not exceed 0.40 lbs/ton aluminum fed, charged or produced.
  - ii. HCl emissions shall not exceed 0.40 lbs/ton aluminum fed, charged or produced or 10 percent of the uncontrolled HCl emissions, by weight.
  - iii. D/F emissions shall not exceed 0.00021 grains of D/F TEQ/ton aluminum fed, charged or produced.

**Compliance Demonstration:**

Compliance with the limits described above shall be determined by comparing the allowable rate to the actual rate as calculated in **SECTION D 2.b.** If the source cannot or chooses not to demonstrate compliance with the individual limits above, the permittee shall maintain a 3-day rolling average of the SAPU emission limits as described in **SECTION D 2.c.**

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****3. Testing Requirements:**

- a. The permittee shall perform a stack test once during the lifetime of this permit to measure PM, HCl and D/F emissions.
- b. See **SECTION D 3.**

**4. Specific Monitoring Requirements:**

The permittee shall monitor the following parameters:

- a. Monthly and 12-month rolling total hours of operation.
- b. Monthly and 12-month rolling total scrap throughput.
- c. Monthly and 12-month rolling total aluminum produced.
- d. Hourly pollutant emission rates (based on monthly average).
- e. Production-based pollutant emission rates.
- f. Weight of gaseous or liquid reactive flux injected in accordance with 40 CFR 63 Subpart RRR, Section 63.1510.
- g. The level of molten metal in accordance with 40 CFR 63 Subpart RRR, Section 63.1510.
- h. Monthly equipment label inspections.
- i. For each baghouse, daily pressure drop from the baghouse entrance to the baghouse exit.
- j. Capture system performance in accordance with the OM&M plan as required by Subpart RRR.
- k. For each control system, daily visual inspections where:
  - i. If no visible emissions are observed then no further monitoring is required.
  - ii. If visible emissions are observed, the permittee shall perform a Method 9 reading.

**5. Specific Record keeping Requirements:**

The permittee shall maintain records of the following information:

- a. Monthly and 12-month rolling total hours of operation.
- b. Monthly and 12-month rolling total scrap throughput.
- c. Monthly and 12-month rolling total aluminum produced.
- d. Hourly pollutant emission rates (based on monthly average).
- e. Production-based pollutant emission rates.
- f. The 15-minute block data of reactive flux injected in accordance with 40 CFR 63 Subpart RRR, Section 63.1510 or an alternative monitoring plan.
- g. The level of molten metal in accordance with 40 CFR 63 Subpart RRR, Section 63.1510 and record exceptions.
- h. Monthly equipment label inspections.
- i. For each baghouse, daily pressure drop measurements.
- j. Each time an emission unit is operating without the associated control equipment due to an unscheduled shut-down or malfunction, a log of the incident which shall include:
  - i. A description of the shut-down or malfunction.
  - ii. The duration of the shut-down or malfunction.

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

- iii. The cause of the shut-down or malfunction.
  - iv. Any corrective action taken.
- k. Daily (calendar day) and during all periods of control equipment malfunction, a log of visible emissions from each control system. If visible emissions are observed, the log shall indicate:
  - i. Whether the visible emissions were normal for the process.
  - ii. Method 9 readings if any visible emissions are seen.
  - iii. The cause of the abnormal visible emissions.
  - iv. Any corrective actions taken.
- l. All other maintenance activities performed at each piece of control equipment.
- m. Current operation, maintenance, and monitoring (OM&M) plan.

**6. Specific Reporting Requirements:**

- a. The permittee shall submit a semi-annual summary report containing the following information:
  - i. Monthly and 12-month rolling total hours of operation.
  - ii. Monthly and 12-month rolling total scrap throughputs.
  - iii. Monthly and 12-month rolling total aluminum produced.
  - iv. Hourly pollutant emission rates (based on monthly average).
  - v. Production-based pollutant emission rates.
  - vi. Daily baghouse pressure drop measurements.
- b. See **SECTION D 6.a.** and **6.b.**

**7. Specific Control Equipment Conditions:**

- a. Pursuant to 40 CFR 63 Subpart RRR 63.1506, the permittee shall:
  - i. Design and install an emission capture and collection system in accordance with Industrial Ventilation: A Handbook of Recommended Practice.
  - ii. Operate the system in accordance with the OM&M plan.
- b. The permittee shall:
  - i. Capture and control particulate emissions.
  - ii. Operate all dropout boxes and baghouses properly and in accordance with baseline parameters set during the performance test.
  - iii. Operate all dropout boxes and baghouses at all times any of the associated emissions units listed in the description above are in operation.
  - iv. Install and operate a bag leak detector system such that:
    - The alarm does not sound more than 5% of operating time fraction in any 6-month period.
    - Should the bag leak detector sound an alarm, the permittee shall initiate corrective action within 1 hour and complete the corrective action procedures in accordance with the OM&M plan.
    - If inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted.

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS,  
AND OPERATING CONDITIONS**

- If corrective action is required, each alarm shall be counted as a minimum of 1 hour.

**Compliance Demonstration:** The permittee shall demonstrate compliance through maintenance of the records as specified in **5. Specific Record Keeping Requirements** above.

8. **Alternate Operating Scenarios:** NA
9. **Compliance Schedule:** NA
10. **Compliance Certification:** See SECTION D 10.

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****3                    DROSS COOLING BUILDING (Stack P-3)**

03 (P-3)        Dross Cooling Building: Emissions from the building are vented through a baghouse.

**APPLICABLE REGULATIONS:**

**401 KAR 51:017 Prevention of Significant Deterioration** – Applies to PM<sub>10</sub> emissions. This regulation supersedes mass emission standards prescribed by 401 KAR 59:010.

**401 KAR 59:010 New Process Operations** – Applies to visible emissions.

**401 KAR 63:020 Potentially Hazardous Matter or Toxic Substances** – Applies to HCl emissions.

**1.        Operating Limitations:** See SECTION D 1.

**2.        Emission Limitations:**

- a.        Pursuant to Regulation 401 KAR 59:010, Section 3 (1), visible emissions from each stack or vent associated with the emission units described above shall not equal or exceed 20%.

**Compliance Demonstration:**

The permittee shall demonstrate compliance through monitoring and maintenance of the records as specified in points **4. Specific Monitoring Requirements** and **5. Specific Record Keeping Requirements** below.

- b.        Pursuant to Regulation 401 KAR 51:017, Section 9 (3) (BACT), particulate emissions (PM<sub>10</sub>) from Stack P-3 shall not exceed 0.24 lbs/hr.

**Compliance Demonstration:**

Compliance with the limits described above shall be determined by comparing the allowable rate to the actual rate as calculated in **SECTION D 2.a.**

- c.        Pursuant to Regulation 401 KAR 63:020, emissions of hydrogen chloride from Stack P-3 shall not exceed 0.02 lbs/hr.

**Compliance Demonstration:**

Compliance with the limits described above shall be determined by comparing the allowable rate to the actual rate as calculated in **SECTION D 2.a.**

**3.        Testing Requirements:** See SECTION D 3.

**4.        Specific Monitoring Requirements:**

The permittee shall monitor the following parameters:

- a.        Monthly and 12-month rolling total hours of operation.
- b.        Monthly and 12-month rolling total dross generated.
- c.        Hourly pollutant emission rates (based on monthly average).
- d.        For each baghouse, daily pressure drop from the baghouse entrance to the baghouse exit.
- e.        For each control system, daily visual inspections where:
  - i.        If no visible emissions are observed then no further monitoring is required.

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

- ii. If visible emissions are observed, the permittee shall perform a Method 9 reading.

**5. Specific Record keeping Requirements:**

The permittee shall maintain records of the following information:

- a. Monthly and 12-month rolling total hours of operation.
- b. Monthly and 12-month rolling total dross generated.
- c. Hourly pollutant emission rates (based on monthly average).
- d. For each baghouse, daily pressure drop measurements.
- e. Each time an emission unit is operating without the associated control equipment due to an unscheduled shut-down or malfunction, a log of the incident which shall include:
  - i. A description of the shut-down or malfunction.
  - ii. The duration of the shut-down or malfunction.
  - iii. The cause of the shut-down or malfunction.
  - iv. Any corrective action taken.
- f. Daily (calendar day) and during all periods of control equipment malfunction, a log of visible emissions from each control system. If visible emissions are observed, the log shall indicate:
  - i. Whether the visible emissions were normal for the process.
  - ii. Method 9 readings if any visible emissions are seen.
  - iii. The cause of the abnormal visible emissions.
  - iv. Any corrective actions taken.
- g. All maintenance activities performed at each piece of control equipment.

**6. Specific Reporting Requirements:**

- a. The permittee shall submit a semi-annual summary report containing the following information:
  - i. Monthly and 12-month rolling total hours of operation.
  - ii. Monthly and 12-month rolling total dross generated.
  - iii. Hourly pollutant emission rates (based on monthly average).
  - iv. Daily baghouse pressure drop measurements.
- b. See **SECTION D 6.a.** and **6.b.**

**7. Specific Control Equipment Conditions:**

The permittee shall:

- a. Capture and control particulate emissions.
- b. Operate the baghouse properly and in accordance with manufacturer's specifications and/or standard operating procedures.
- c. Operate the baghouse at all times dross is being handled or loaded.

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS,  
AND OPERATING CONDITIONS**

**Compliance Demonstration:**

The permittee shall demonstrate compliance through maintenance of the records as specified in **5. Specific Record Keeping Requirements** above.

8. **Alternate Operating Scenarios:** NA
9. **Compliance Schedule:** NA
10. **Compliance Certification:** NA

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****4                    DECOATING FURNACES (Stacks C-1 & C-2)**

09 (C-1)      Line 1 Decoater Control System Description: This system consists of an Afterburner (30 mmBTU/hr, Natural Gas fired) and a Fuel Tech NO<sub>x</sub>OUT<sup>®</sup> System. The following emission units are vented to the Line 1 Decoater Control System:

- Decoating Furnace #1

Construction commenced: May 13, 1998

09 (C-2)      Line 2 Decoater Control System Description: This system consists of an Afterburner (30 mmBTU/hr, Natural Gas fired) and a Fuel Tech NO<sub>x</sub>OUT<sup>®</sup> System. The following emission units are vented to the Line 2 Decoater Control System:

- Decoating Furnace #2

Construction commenced: May 13, 1998

**APPLICABLE REGULATIONS:**

**401 KAR 51:017 Prevention of Significant Deterioration** – Applies to CO, NO<sub>x</sub>, and VOC emissions.

**401 KAR 59:010 New Process Operations** – Applies to visible emissions.

**40 CFR 63 Subpart RRR Secondary Aluminum Production NESHAP** – Applies to PM/PM<sub>10</sub>, THC, HCl and D/F emissions from each De-Coating Furnace.

**1.      Operating Limitations:**

- a. Pursuant to 40 CFR 63, Subpart RRR, Section 63.1506, the permittee shall:
  - i. Install, calibrate, operate, and maintain a device to measure and record the total weight of material fed/charged to or the aluminum produced by the affected source or emission unit over the same operating cycle or time period used in the performance test or an approved alternative.
  - ii. Provide and maintain easily visible labels posted at each emission unit that identify the applicable emission limits and the means of compliance.
- b. See **SECTION D 1.**

**2.      Emission Limitations:**

- a. Pursuant to 401 KAR 59:010, Section 3 (1), visible emissions from each stack or vent associated with the emission units described above shall not equal or exceed 20%.

**Compliance Demonstration:**

The permittee shall demonstrate compliance through monitoring and maintenance of the records as specified in points **4. Specific Monitoring Requirements** and **5. Specific Record Keeping Requirements** below.

- b. Pursuant to 401 KAR 51:017 Section 9 (3) (BACT), mass emissions from each stack (C-1 and C-2) shall not exceed the following limits:
  - i. CO emissions shall not exceed 13.3 lbs/hr.



**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

- ii. NO<sub>x</sub> emission shall not exceed 13.0 lbs/hr.
- iii. VOC emissions shall not exceed 3.55 lbs/hr.

**Compliance Demonstration:**

Compliance with the limits described above shall be determined by comparing the allowable rate to the actual rate as calculated in **SECTION D 2.a.**

- c. Pursuant to 40 CFR 63 Subpart RRR, emissions from each de-coating furnace shall not exceed the following limits:
  - i. PM emissions shall not exceed 0.3 lbs/ton aluminum fed, charged or produced.
  - ii. THC emissions (as propane) shall not exceed 0.2 lbs/ton aluminum fed, charged or produced.
  - iii. HCl emissions shall not exceed 1.5 lbs/ton aluminum fed, charged or produced.
  - iv. D/F TEQ emissions shall not exceed 0.000075 grains TEQ/ton aluminum fed, charged or produced.

**Compliance Demonstration:**

Compliance with the limits described above shall be determined by comparing the allowable rate to the actual rate as calculated in **SECTION D 2.b.**

**3. Testing Requirements:**

- a. The permittee shall perform a stack test once during the lifetime of this permit to measure PM, THC, HCl and D/F emissions.
- b. Performance testing shall be done in accordance with Subpart RRR, Section 63.1511 and 63.1512.
- c. See **SECTION D 3.**

**4. Specific Monitoring Requirements:**

The permittee shall monitor the following parameters:

- a. Monthly and 12-month rolling total hours of operation.
- b. Monthly and 12-month rolling total scrap throughput.
- c. Monthly and 12-month rolling total aluminum produced.
- d. Hourly pollutant emission rates (based on monthly average).
- e. Production-based pollutant emission rates.
- f. 3-hour block average afterburner operating temperature.
- g. NOxOUT<sup>®</sup> reagent flowrate.
- h. Capture system performance in accordance with the OM&M plan as required by Subpart RRR.
- i. Monthly equipment label inspections.
- j. For each control system, daily visual inspections where:
  - i. If no visible emissions are observed then no further monitoring is required.
  - ii. If visible emissions are observed, the permittee shall perform a Method 9 reading.

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****5. Specific Record keeping Requirements:**

The permittee shall maintain records of the following information:

- a. Monthly and 12-month rolling total hours of operation.
- b. Monthly and 12-month rolling total scrap throughput.
- c. Monthly and 12-month rolling total aluminum produced.
- d. Hourly pollutant emission rates (based on monthly average).
- e. Production-based pollutant emission rates.
- f. For each afterburner, continuous records (on strip chart recorder, electronic data acquisition system or equivalent) of the combustion temperature.
- g. For each NOxOUT<sup>®</sup> system:
  - i. Continuous records (on strip chart recorder, electronic data acquisition system or equivalent) of the NOxOUT<sup>®</sup> reagent flowrate.
  - ii. Results of all calibrations and testing performed on the NOxOUT<sup>®</sup> system.
- h. Monthly equipment label inspections.
- i. Each time the afterburner combustion temperature falls below 750°C, the NOxOUT<sup>®</sup> reagent falls below 90% of the gallons reagent/ton aluminum throughput rate determined during the last system service or an emission unit is operating without the associated control equipment due to an unscheduled shut-down or malfunction, a log of the incident which shall include:
  - i. A description of the shut-down, malfunction or excursion from normal operating conditions.
  - ii. The duration of the shut-down, malfunction or excursion from normal operating conditions.
  - iii. The cause of the shut-down, malfunction or excursion from normal operating conditions.
  - iv. Any corrective action taken.
- j. Daily (calendar day) and during all periods of control equipment malfunction, a log of visible emissions from each control system. If visible emissions are observed, the log shall indicate:
  - i. Whether the visible emissions were normal for the process.
  - ii. Method 9 readings if any visible emissions are seen.
  - iii. The cause of the abnormal visible emissions.
  - iv. Any corrective actions taken.
- k. All other maintenance activities performed at each piece of control equipment.
- l. Current operation, maintenance, and monitoring (OM&M) plan.

**6. Specific Reporting Requirements:**

- a. The permittee shall submit a semi-annual summary report containing the following information:
  - i. Monthly and 12-month rolling total hours of operation.
  - ii. Monthly and 12-month rolling total scrap throughputs.
  - iii. Monthly and 12-month rolling total aluminum produced.
  - iv. Hourly pollutant emission rates (based on monthly average).
  - v. Production-based pollutant emission rates.

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

- vi. 3-hour block average afterburner operating temperature.
- vii. NO<sub>x</sub>OUT<sup>®</sup> reagent flowrate.
- b. See **SECTION D 6.a.** and **6.b.**

**7. Specific Control Equipment Conditions:**

- a. Pursuant to 40 CFR 63 Subpart RRR 63.1506, the permittee shall:
  - i. Design and install an emission capture and collection system in accordance with Industrial Ventilation: A Handbook of Recommended Practice.
  - ii. Operate the system in accordance with the OM&M plan.
- b. The permittee shall:
  - i. Capture and control CO and VOC emissions.
  - ii. Operate all afterburners properly and in accordance with baseline parameters set during the performance test.
  - iii. Operate all afterburners at all times any of the associated emissions units listed in the description above are in operation.
  - iv. Maintain, calibrate and operate according to manufacturer's specification, a monitoring device to ensure the 3-hour block average combustion temperature remains above 750°C or the temperature established during a performance test.

**Compliance Demonstration:**

The permittee shall demonstrate compliance through maintenance of the records as specified in **5. Specific Record Keeping Requirements** above.

- c. The permittee shall:
  - i. Capture and control NO<sub>x</sub> emissions.
  - ii. Operate the Fuel Tech NO<sub>x</sub>OUT<sup>®</sup> control systems properly and in accordance with manufacturer's specifications and/or standard operating procedures.
  - iii. Operate the Fuel Tech NO<sub>x</sub>OUT<sup>®</sup> control systems at all times any of the associated emissions units listed in the description above are in operation.
  - iv. Maintain the NO<sub>x</sub>OUT<sup>®</sup> reagent injection rate to within  $\pm 10\%$  of the rate determined during the last system calibration (excursions from this operating range are defined as any 1-hour period during which the average NO<sub>x</sub>OUT<sup>®</sup> reagent injection rate is below 90% or above 110% of the gallons reagent/aluminum shred throughput ratio determined during the last system service).
  - v. Test and calibrate the Fuel Tech NO<sub>x</sub>OUT<sup>®</sup> reagent system at least once every four calendar months.

**Compliance Demonstration:**

The permittee shall demonstrate compliance through maintenance of the records as specified in **5. Specific Record Keeping Requirements** above.

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS,  
AND OPERATING CONDITIONS**

- d. The permittee shall:
  - i. Operate the afterburner at temperatures above 750°C or the temperature established during a performance test (excursions from this operating range are defined as any period during which the 3 hour average temperature in the afterburner is below the temperature established during the performance test pursuant to 63.1506(g)(1)(i)).
  - ii. Operate the afterburner temperature monitoring system in accordance with the requirements of Subpart RRR, Section 63.1510.
  - iii. Perform afterburner inspections in accordance with Subpart RRR, Section 63.1510.

8. Alternate Operating Scenarios: NA

9. Compliance Schedule: NA

10. Compliance Certification: See SECTION D 10.

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****5 DECOATING & HOLDING FURNACES (Stacks P-9a & P9b)**

09 (P-9a) Line 1 DHA Control System: This system consists of a Quench Reactor, a Dry Venturi Scrubber and a Baghouse. The following emission units are vented to the Line 1 DHA Control System:

- Decoating Furnace #1 Control System
- Hold Furnace #1C
- Alcan Compact Degasser

09 (P-9b) Line 2 DHA Control System: This system consists of a Quench Reactor, a Dry Venturi Scrubber and a Baghouse. The following emission units are vented to the Line 2 DHA Control System:

- Decoating Furnace #2 Control System
- Hold Furnace #2C
- Alternate Ductwork for ACD

**APPLICABLE REGULATIONS:**

**401 KAR 51:017 Prevention of Significant Deterioration** – Applies to PM/PM<sub>10</sub> emissions. This regulation supersedes mass emission standards prescribed by 401 KAR 59:010.

**401 KAR 59:010 New Process Operations** – Applies to visible emissions.

**40 CFR 63 Subpart RRR Secondary Aluminum Production NESHAP** – Applies to PM/PM<sub>10</sub>, THC, HCl and D/F emissions from each De-Coating Furnace, Holding Furnace and Degasser.

**1. Operating Limitations:**

- a. Pursuant to 40 CFR 63, Subpart RRR, Section 63.1506, the permittee shall:
  - i. Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
  - ii. Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each affected source or emission unit.
  - iii. Install, calibrate, operate, and maintain a device to measure and record the total weight of material fed/charged to or the aluminum produced by the affected source or emission unit over the same operating cycle or time period used in the performance test or an approved alternative.
  - iv. Provide and maintain easily visible labels posted at each emission unit that identify the applicable emission limits and the means of compliance.
- b. See **SECTION D 1.**

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****2. Emission Limitations:**

- a. Pursuant to Regulation 401 KAR 59:010, Section 3 (1), visible emissions from each stack or vent associated with the emission units described above shall not equal or exceed 20%.

**Compliance Demonstration:**

The permittee shall demonstrate compliance through monitoring and maintenance of the records as specified in points **4. Specific Monitoring Requirements** and **5. Specific Record Keeping Requirements** below.

- b. Pursuant to 401 KAR 51:017 Section 9 (3) (BACT), particulate (PM<sub>10</sub>) emissions from each stack (P-9a & P-9b) shall not exceed 1.8 lbs/hr.

**Compliance Demonstration:**

Compliance with the limits described above shall be determined by comparing the allowable rate to the actual rate as calculated in **SECTION D 2.a.**

- c. Pursuant to 40 CFR 63 Subpart RRR, emissions from each de-coating furnace shall not exceed the following limits:

- i. PM emissions shall not exceed 0.3 lbs/ton aluminum fed, charged or produced.
- ii. THC emissions (as propane) shall not exceed 0.2 lbs/ton aluminum fed, charged or produced.
- iii. HCl emissions shall not exceed 1.5 lbs/ton aluminum fed, charged or produced.
- iv. D/F TEQ emissions shall not exceed 0.000075 grains TEQ/aluminum fed, charged or produced.

**Compliance Demonstration:**

Compliance with the limits described above shall be determined by comparing the allowable rate to the actual rate as calculated in **SECTION D 2.b.**

- d. Pursuant to 40 CFR 63 Subpart RRR, emissions from each holding furnace shall not exceed the following limits:

- i. PM emissions shall not exceed 0.40 lbs/ton aluminum fed, charged or produced.
- ii. HCl emissions shall not exceed 0.40 lbs/ton aluminum fed, charged or produced or 10 percent of the uncontrolled HCl emissions, by weight.

**Compliance Demonstration:**

Compliance with the limits described above shall be determined by comparing the allowable rate to the actual rate as calculated in **SECTION D 2.b.**

- e. Pursuant to 40 CFR 63 Subpart RRR, emissions from the compact degasser shall not exceed the following limits:

- i. PM emissions shall not exceed 0.01 lbs/ton aluminum fed, charged or produced.
- ii. HCl emissions shall not exceed 0.04 lbs/ton aluminum fed, charged or produced.

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****Compliance Demonstration:**

Compliance with the limits described above shall be determined by comparing the allowable rate to the actual rate as calculated in **SECTION D 2.b.**

**3. Testing Requirements:**

- a. The permittee shall perform a stack test once during the lifetime of this permit to measure PM, THC, HCl and D/F emissions.
- b. Performance testing shall be done in accordance with Subpart RRR, Section 63.1511 and 63.1512.
- c. See **SECTION D 3.**

**4. Specific Monitoring Requirements:**

The permittee shall monitor the following parameters:

- a. Monthly and 12-month rolling total hours of operation.
- b. Monthly and 12-month rolling total aluminum throughput.
- c. Monthly and 12-month rolling total aluminum produced.
- d. Hourly pollutant emission rates (based on monthly average).
- e. Production-based pollutant emission rates.
- h. Continuous weight of gaseous or liquid reactive flux injected in accordance with 40 CFR 63 Subpart RRR, Section 63.1510.
- i. Monthly equipment label inspections.
- j. For each baghouse:
  - i. Daily pressure drop from the baghouse entrance to the baghouse exit.
  - ii. Continuous 3-hour block average inlet temperature.
- k. For each quench reactor:
  - i. Daily lime feeder setting.
  - ii. Continuous 3-hour block average lime slurry flowrate to the reactor.
- l. For each dry venturi, continuous operation of the Tesisorb feeder.
- m. For each capture system, monthly inspections where:
  - i. Equipment important to the performance of the total capture system (i.e., pressure sensors, dampers, etc.) is inspected.
  - ii. The inspection includes observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion).
  - iii. Any capture system deficiencies shall be noted and proper maintenance performed.
- n. For each control system, daily visual inspections where:
  - i. If no visible emissions are observed then no further monitoring is required.
  - ii. If visible emissions are observed, the permittee shall perform a Method 9 reading

**5. Specific Record keeping Requirements:**

The permittee shall maintain records of the following information:

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

- a. Monthly and 12-month rolling total hours of operation.
- b. Monthly and 12-month rolling total aluminum throughput.
- c. Monthly and 12-month rolling total aluminum produced.
- d. Hourly pollutant emission rates (based on monthly average).
- e. Production-based pollutant emission rates.
- f. Monthly flux usage.
- g. Monthly equipment label inspections.
- h. For each quench reactor:
  - i. Daily records of lime feeder setting.
  - ii. Continuous records (on strip chart recorder, electronic data acquisition system or equivalent) of the lime slurry flow rate.
- i. For each dry venturi, monthly records of Tesisorb consumed.
- j. For each capture system, records of monthly inspections.
- k. For each baghouse:
  - i. Daily records pressure drop from the baghouse entrance to the baghouse exit.
  - ii. Continuous records (on strip chart recorder, electronic data acquisition system or equivalent) of the inlet temperature.
- l. Each time the 3-hour block average quench reactor lime injection rate falls below 90% of the rate determined during the last performance test or an emission unit is operating without the associated control equipment due to an unscheduled shut-down or malfunction, a log of the incident which shall include:
  - i. A description of the shut-down, malfunction or excursion from normal operating conditions.
  - ii. The duration of the shut-down, malfunction or excursion from normal operating conditions.
  - iii. The cause of the shut-down, malfunction or excursion from normal operating conditions.
  - iv. Any corrective action taken.
- m. Daily (calendar day) and during all periods of control equipment malfunction, a log of visible emissions from each control system. If visible emissions are observed, the log shall indicate:
  - i. Whether the visible emissions were normal for the process.
  - ii. Method 9 readings if any visible emissions are seen.
  - iii. The cause of the abnormal visible emissions.
  - iv. Any corrective actions taken.
- n. All other maintenance activities performed at each piece of control equipment.
- o. Current operation, maintenance, and monitoring (OM&M) plan.

**6. Specific Reporting Requirements:**

- a. The permittee shall submit a semi-annual summary report containing the following information:
  - i. Monthly and 12-month rolling total hours of operation.



**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

- ii. Monthly and 12-month rolling total scrap throughputs.
- iii. Monthly and 12-month rolling total aluminum produced.
- iv. Hourly pollutant emission rates (based on monthly average).
- v. Production-based pollutant emission rates.
- vi. Daily baghouse pressure drop measurements.
- vii. Lime slurry flowrate.
- viii. Tesisorb feed rate.
- ix. Monthly flux usage.
- b. See **SECTION D 6.a.** and **6.b.**

**7. Specific Control Equipment Conditions:**

- a. Pursuant to 40 CFR 63 Subpart RRR 63.1506, the permittee shall:
  - i. Design and install an emission capture and collection system in accordance with Industrial Ventilation: A Handbook of Recommended Practice.
  - ii. Operate the system in accordance with the OM&M plan.
- b. The permittee shall:
  - i. Capture and control particulate emissions.
  - ii. Operate all baghouses properly and in accordance with baseline parameters set during the performance test.
  - iii. Operate all baghouses at all times any of the associated emissions units listed in the description above are in operation.
  - iv. Maintain, calibrate and operate according to manufacturer's specification, a monitoring device to ensure the 3-hour block average inlet temperature remains at or below the average temperature established during the most recent performance test + 25°F.
  - v. Install and operate a bag leak detector system such that:
    - The alarm does not sound more than 5% of operating time fraction in any 6-month period.
    - Should the bag leak detector alarm sound, the permittee shall initiate corrective action within 1 hour and complete the corrective action procedures in accordance with the OM&M plan.
    - If inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted.
    - If corrective action is required, each alarm shall be counted as a minimum of 1 hour.

**Compliance Demonstration:**

The permittee shall demonstrate compliance through maintenance of the records as specified in **5. Specific Record Keeping Requirements** above.

- c. The permittee shall:
  - i. Capture and control HCl emissions.
  - ii. Operate all quench reactors properly and in accordance with baseline parameters set during the performance test.

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS,  
AND OPERATING CONDITIONS**

- iii. Operate all quench reactors at all times any of the associated emissions units listed in the description above are in operation.
- iv. Establish the normal operating range (slurry concentration, slurry flowrate, inlet and outlet temperatures) during the testing required by this permit.
- v. Maintain free-flowing lime to the quench reactor feed at all times,
- vi. Maintain the lime feeder setting at the same level established during the performance test.
- vii. Maintain, calibrate and operate according to manufacturer's specification, a monitoring device to ensure continuous flow of lime slurry to the reactor.

**Compliance Demonstration:** The permittee shall demonstrate compliance through maintenance of the records as specified in **5. Specific Record Keeping Requirements** above.

- d. The permittee shall:
  - i. Capture and control HCl emissions.
  - ii. Operate all dry venturis properly and in accordance with baseline parameters set during the performance test.
  - iii. Operate all dry venturis at all times any of the associated emissions units listed in the description above are in operation.
  - iv. For each dry venturi, the permittee shall establish the normal operating range (Tesisorb injection rate) during the testing required by this permit.
  - v. Maintain, calibrate and operate according to manufacturer's specification, a Tesisorb feeder system.

**Compliance Demonstration:** The permittee shall demonstrate compliance through maintenance of the records as specified in **5. Specific Record Keeping Requirements** above.

**8. Alternate Operating Scenarios:** NA

**9. Compliance Schedule:** NA

**10. Compliance Certification:** See **SECTION D 10.**

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****6 MELT FURNACES (Stacks P-10 & P-2)**

- 04 (P-10) Line 1 Melt Furnaces #1A & #1B: This line consists of two melt furnaces each equipped with a Regenerated Burner (15.0 mmBTU/hr, Natural Gas fired) and a Direct Fired Burner (30.0mmBTU/hr, Natural Gas fired).
- 04 (P-2) Line 2 Melt Furnaces #2A & #2B: This line consists of two melt furnaces each equipped with a Regenerated Burner (15.0 mmBTU/hr, Natural Gas fired) and a Direct Fired Burner (30.0mmBTU/hr, Natural Gas fired).

Control Device for all melt furnaces: Hot baghouses 1, 2, and 3

**APPLICABLE REGULATIONS:**

**401 KAR 51:017 Prevention of Significant Deterioration** – Applies to CO, NO<sub>x</sub>, VOC, and PM/PM<sub>10</sub> emissions. This regulation supersedes mass emission standards prescribed by 401 KAR 59:010.

**401 KAR 59:010 New Process Operations** – Applies to visible emissions.

**40 CFR 63 Subpart RRR Secondary Aluminum Production NESHAP** – Applies to operations of, and monitoring and recordkeeping for, each Group 2 Furnace.

**1. Operating Limitations:**

- a. Pursuant to 40 CFR 63, Subpart RRR, Section 63.1506, the permittee shall operate each furnace using:
  - i. Only clean charge or molten aluminum as the feedstock.
  - ii. No reactive flux.
- b. See **SECTION D 1.**

**2. Emission Limitations:**

- a. Pursuant to Regulation 401 KAR 59:010, Section 3 (1), visible emissions from each stack or vent associated with the emission units described above shall not equal or exceed 20%.

**Compliance Demonstration:** No compliance demonstration is necessary as long as natural gas is the only fuel used.
- b. Pursuant to 401 KAR 51:017 Section 9 (3) (BACT), mass emissions shall not exceed the following limits:
  - i. HCl emissions shall not exceed 0.45 lbs/hr.
  - ii. CO emissions shall not exceed 2.2 lbs/hr.
  - iii. NO<sub>x</sub> emissions shall not exceed 2.75 lbs/hr.
  - iv. VOC emissions shall not exceed 0.75 lbs/hr.
  - v. PM<sub>10</sub> emissions shall not exceed 1.5 lbs/hr.

**Compliance Demonstration:**

Compliance with the limits described above shall be determined by comparing the allowable rate to the actual rate as calculated in **SECTION D 2.a.**

## **SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

**3. Testing Requirements:**

- a. The permittee shall perform a stack test once during the lifetime of this permit.
- b. See **SECTION D 3.**

**4. Specific Monitoring Requirements:**

The permittee shall monitor the following parameters:

- a. Monthly and 12-month rolling total hours of operation.
- b. Monthly and 12-month rolling total scrap throughput.
- c. Monthly and 12-month rolling total aluminum produced.
- d. Monthly natural gas usage.
- e. Hourly pollutant emission rates (based on monthly average).

**5. Specific Record keeping Requirements:**

The permittee shall maintain records of the following information:

- a. Monthly and 12-month rolling total hours of operation
- b. Monthly and 12-month rolling total scrap throughput.
- c. Monthly and 12-month rolling total aluminum produced.
- d. Monthly natural gas usage.
- e. Hourly pollutant emission rates (based on monthly average).

**6. Specific Reporting Requirements:**

- a. The permittee shall submit an annual summary report containing the following information:
  - i. Monthly and 12-month rolling total hours of operation.
  - ii. Monthly and 12-month rolling total scrap throughputs.
  - iii. Monthly and 12-month rolling total aluminum produced.
  - iv. Monthly natural gas usage.
  - v. Hourly pollutant emission rates (based on monthly average).
- b. See **SECTION D 6.a. and 6.b.**

**7. Specific Control Equipment Conditions: NA**

**8. Alternate Operating Scenarios: NA**

**9. Compliance Schedule: NA.**

**10. Compliance Certification: See **SECTION D 10.****

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****7                    SOW PREHEATERS (Stacks C-11b & C-11c)**

- 05 (C-11b)    Sow Preheater #2: This emission point consists of Natural Gas fired units. Three (3) burners rated at 1.5 mmBtu/hr each.
- 05 (C-11c)    Sow Preheater #3: This emission point consists of Natural Gas fired units. Four (4) burners rated at 1.5 mmBtu/hr each.

**APPLICABLE REGULATIONS:**

**401 KAR 51:017 Prevention of Significant Deterioration** – Applies to CO, NO<sub>x</sub>, VOC, and PM/PM<sub>10</sub> emissions. This regulation supersedes mass emission standards prescribed by 401 KAR 59:010.

**401 KAR 59:010 New Process Operations** – Applies to visible emissions.

**1.        Operating Limitations:** See **SECTION D 1.a.**

**2.        Emission Limitations:**

- a.       Pursuant to Regulation 401 KAR 59:010, Section 3 (1), visible emissions from each stack or vent associated with the emission units described above shall not equal or exceed 20%.

**Compliance Demonstration:**

No compliance demonstration is necessary as long as natural gas is the only fuel used.

- b.       Pursuant to 401 KAR 51:017 Section 9 (3) (BACT), mass emissions shall not exceed the following limits:
- i.      CO emissions shall not exceed 0.38 lbs/hr.
  - ii.     NO<sub>x</sub> emissions shall not exceed 0.45 lbs/hr.
  - iii.    VOC emissions shall not exceed 0.024 lbs/hr.
  - iv.    PM<sub>10</sub> emissions shall not exceed 0.034 lbs/hr.

**Compliance Demonstration:**

Compliance with the limits described above shall be determined by comparing the allowable rate to the actual rate as calculated in **SECTION D 2.a.**

**3.        Testing Requirements:** See **SECTION D 3.**

**4.        Specific Monitoring Requirements:**

The permittee shall monitor the following parameters:

- a.       Monthly and 12-month rolling total hours of operation.
- b.       Monthly natural gas usage.
- c.       Hourly pollutant emission rates (based on monthly average).

**5.        Specific Record keeping Requirements:**

The permittee shall maintain records of the following information:

- a.       Monthly and 12-month rolling total hours of operation.

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS,  
AND OPERATING CONDITIONS**

- b. Monthly natural gas usage.
  - c. Hourly pollutant emission rates (based on monthly average).
- 6. **Specific Reporting Requirements:**
  - a. The permittee shall submit an annual summary report containing the following information:
    - i. Monthly and 12-month rolling total hours of operation.
    - ii. Monthly natural gas usage.
    - iii. Hourly pollutant emission rates (based on monthly average).
  - b. See **SECTION D 6.a.**
- 7. **Specific Control Equipment Conditions:** NA
- 8. **Alternate Operating Scenarios:** NA
- 9. **Compliance Schedule:** NA
- 10. **Compliance Certification:** NA

## **SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

### **8 BALE BREAKER (Stack DB-1)**

Control equipment: Baghouse

Construction commenced: January 18, 2001

#### **APPLICABLE REGULATIONS:**

**401 KAR 51:017 Prevention of Significant Deterioration** – Applies to PM/PM<sub>10</sub> emissions. This regulation supersedes mass emission standards prescribed by 401 KAR 59:010.

**401 KAR 59:010 New Process Operations** – Applies to visible emissions.

#### **1. Operating Limitations: See SECTION D 1.a.**

#### **2. Emission Limitations:**

- a. Pursuant to Regulation 401 KAR 59:010, Section 3 (1), visible emissions from each stack or vent associated with the emission units described above shall not equal or exceed 20%.

**Compliance Demonstration:** The permittee shall demonstrate compliance through monitoring and maintenance of the records as specified in points **4. Specific Monitoring Requirements** and **5. Specific Record Keeping Requirements** below.

- b. Pursuant to 401 KAR 51:0170 Section 9 (3) (BACT), particulate (PM<sub>10</sub>) emissions shall not exceed 2.0 lbs/hr.

**Compliance Demonstration:**

Compliance with the limits described above shall be determined by comparing the allowable rate to the actual rate as calculated in **SECTION D 2.a.**

#### **3. Testing Requirements:**

- a. The permittee shall perform a stack test once during the lifetime of this permit.
- b. See **SECTION D 3.**

#### **4. Specific Monitoring Requirements:**

The permittee shall monitor the following parameters:

- a. Monthly and 12-month rolling total hours of operation.
- b. Monthly and 12-month rolling total scrap throughput.
- c. Hourly pollutant emission rates (based on monthly average).

#### **5. Specific Record keeping Requirements:**

The permittee shall maintain records of the following information:

- a. Monthly and 12-month rolling total hours of operation.
- b. Monthly and 12-month rolling total scrap throughput.
- c. Hourly pollutant emission rates (based on monthly average).

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS,  
AND OPERATING CONDITIONS**

**6. Specific Reporting Requirements:**

- a. The permittee shall submit an annual summary report containing the following information:
  - i. Monthly and 12-month rolling total hours of operation.
  - ii. Monthly and 12-month rolling total scrap throughput.
  - iii. Hourly pollutant emission rates (based on monthly average).
- b. See **SECTION D 6.a.**

**7. Specific Control Equipment Conditions: NA**

**8. Alternate Operating Scenarios: NA**

**9. Compliance Schedule: NA**

**10. Compliance Certification: NA**



**SECTION C – INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

Description	Generally Applicable Regulation
1. Limestone Silo (P-4)	401 KAR 59:010
2. Portable Vacuum (P-5)	401 KAR 59:010
3. Lime Silo (P-7)	401 KAR 59:010
4. Tesisorb Silo (P-8)	401 KAR 59:010
5. ABF preheat	NA

## SECTION D – SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

### 1. Operating Limitations:

To ensure compliance with the emission limitations listed in **SECTION B**, total aluminum production shall not exceed 380,980 tons/yr.

#### **Compliance Demonstration:**

Compliance with the limit described above shall be determined by comparing the allowable rate to the actual rate as calculated below:

$$P_{an} = \sum_{i=1}^{12} P_{moi}$$

Where i is the month,  $P_{moi}$  is the total aluminum produced for month i (tons/month) and  $P_{an}$  is the actual 12-month rolling total aluminum produced (tons/year).

### 2. Emission Limitations:

- a. Compliance with the mass emission limits described in **SECTION B** above shall be determined by comparing the allowable rate to the actual rate as calculated below:

$$E_{Xi} = \frac{P_i \cdot EF_X}{h_i} \cdot \left(1 - \frac{CE}{100}\right)$$

Where i is the month, X is the pollutant,  $E_{Xi}$  is the actual average hourly emission rate for pollutant X during month i (pounds/hour),  $P_i$  is the actual specific operating parameter for month i (units/month),  $EF_X$  is the overall uncontrolled KYEIS emission factor for pollutant X (pounds/units),  $h_i$  is the actual total hours of operation for month i (hours/month) and CE is the overall control efficiency (%) of any add-on on air pollution control equipment. Note that the specific operating parameter precedes the numerical limit listed in **SECTION B 1. Operating Limits** (e.g. material processed, aluminum charged, aluminum produced, etc.).

- b. Compliance with the production-based mass emission limits described in **SECTION B** above shall be determined by comparing the allowable rate to the actual rate as calculated below:

$$X = \frac{E_X}{P}$$

Where X is the production-based emission rate of each limited pollutant (pounds/ton aluminum fed, charged or produced),  $E_X$  is the actual hourly emission rate of pollutant X as determined during a performance test (pounds/hour) and P is the actual total aluminum fed, charged or produced during the performance test (tons/hour).

- c. Pursuant to 40 CFR Part 63 Subpart RRR:

## SECTION D – SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

- i. If each existing unit within the SAPU is in compliance with individual emission limits, then the permittee shall be considered to be in compliance and the three-day rolling SAPU calculation shall not be required.
- ii. If the source cannot or chooses not to demonstrate compliance with the individual limits, the permittee shall maintain a 3-day rolling average of the SAPU emission limits.
- iii. SAPU emission limits for each pollutant shall be determined by applying the following equation:

$$E' = \frac{\sum_{j=1}^n (L_{Xi} \cdot P_i)}{\sum_{j=1}^n (P_i)}$$

Where, j is the unit, n is the total number of units in the SAPU, X indicates the specific pollutant, E' is the allowable SAPU emissions,  $L_{Xi}$  is the emission limit for pollutant X specific to unit i (pounds/tons material charged), and  $P_i$  is the operating rate for unit i (tons material processed/hour).

### **Compliance Demonstration:**

The 3-day rolling average for an individual SAPU shall be calculated with the following equations:

$$E_X = \frac{\sum_{i=1}^3 E_{Xi}}{3}$$

$$E_{Xi} = \frac{\sum_{j=1}^n X_j \cdot P_{ij}}{\sum_{j=1}^n P_{ij}}$$

Where  $E_X$  is the 3-day rolling average emissions of pollutant X (pounds/tons material processed), i is the day, j is the unit, n is the total number of units in SAPU,  $E_{Xi}$  is the estimated actual emissions from the SAPU on day i (lb/tons material charged),  $X_j$  is the measured emission rate of pollutant X from emission unit j as determined in the performance test (pounds/ton of material processed), and  $P_{ij}$  is the total amount of material processed in unit j on day i (tons).

### 3. **Testing Requirements:**

Testing shall be conducted in accordance with 401 KAR 50:045, Section (1); 401 KAR 59:005, Section 2 (2) and/or 40 CFR 63 Subpart RRR.

### 4. **Specific Monitoring Requirements:** NA

## **SECTION D – SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS**

5. **Specific Record Keeping Requirements:** NA
6. **Specific Reporting Requirements:**
  - a. The permittee shall report all visible emissions readings in excess of the 20% limit specified in this permit on a semi-annual basis to the Division's Frankfort Regional office.
  - b. Should two consecutive semi-annual reports show noncompliance, the permittee will be required to submit quarterly reports until three consecutive reports show compliance.
7. **Specific Control Equipment Operating Conditions:** NA
8. **Alternate Operating Scenarios:** NA
9. **Compliance Schedule:** NA
10. **Compliance Certification:**

The permittee shall submit a certification of compliance with the operational standards for each 6-month reporting period in accordance with 40 CFR 63 Subpart RRR, Section 63.1510.

## **SECTION E – SOURCE CONTROL EQUIPMENT REQUIREMENTS**

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

## SECTION F – MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place as defined in this permit, and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit;
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

## SECTION F – MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
  - a. Identification of the term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
  - f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

## **SECTION F – MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS**

Division for Air Quality  
Frankfort Regional Office  
643 Teton Trail, Suite B  
Frankfort, KY 40601

Division for Air Quality  
Central Files  
200 Fair Oaks Lane, 1<sup>st</sup> Floor  
Frankfort, KY 40601

US EPA Region IV  
Air Enforcement Branch  
Atlanta Federal Center  
61 Forsyth St.  
Atlanta GA 30303-8960

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.



**SECTION G – GENERAL CONDITIONS****1. General Compliance Requirements**

- a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
  - (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
  - (4) New requirements become applicable to a source subject to the Acid Rain Program.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopening shall be made as expeditiously as practicable. Reopening shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

## SECTION G – GENERAL CONDITIONS

- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020 Section 3(1)(c)].
- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-15-b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3) 2.].
- l. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3) 4.].

## SECTION G – GENERAL CONDITIONS

- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3) 1.].
- p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
- q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
  - (1) Applicable requirements that are included and specifically identified in the permit and
  - (2) Non-applicable requirements expressly identified in this permit.

### 2. Permit Expiration and Reapplication Requirements

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

### 3. Permit Revisions

- a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

**SECTION G – GENERAL CONDITIONS****4. Construction, Start-Up, and Initial Compliance Demonstration Requirements**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission unit 11 (Rotogrind Shredder Unit) in accordance with the terms and conditions of this permit.

- a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
  - (1) The date when construction commenced.
  - (2) The date of start-up of the affected facilities listed in this permit.
  - (3) The date when the maximum production rate specified in the permit application was achieved.
- c. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- d. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
- e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of this permit.

## SECTION G – GENERAL CONDITIONS

- f. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

### 5. Testing Requirements

- a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.
- b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

### 6. Acid Rain Program Requirements

- a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NO<sub>x</sub> compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

### 7. Emergency Provisions

## SECTION G – GENERAL CONDITIONS

- a. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - (1) An emergency occurred and the permittee can identify the cause of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - (4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
  - (5) This requirement does not relieve the source of other local, state or federal notification requirements.
- b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
- c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

### 8. Ozone Depleting Substances

- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
  - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

## SECTION G – GENERAL CONDITIONS

- b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

### 9. Risk Management Provisions

- a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center  
P.O. Box 1515  
Lanham-Seabrook, MD 20703-1515.

- b. If requested, submit additional relevant information to the Division or the U.S. EPA.

**SECTION H – ALTERNATE OPERATION SCENARIOS**

None



**SECTION I – COMPLIANCE SCHEDULE**

None